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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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07/663,397 03/01/91 NGUYEN

XEXAMINE91-169

BACHMAN AND LA POINTE  
SUITE 1201  
900 CHAPEL STREET  
NEW HAVEN, CT 06510-8201

HASTINGS,K ART UNIT PAPER NUMBER

DATE MAILED 1303

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This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

10/22/91

This application has been examined  Responsive to communication filed on 9-13-91  This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

1.  Notice of References Cited by Examiner, PTO-892.  
2.  Notice re Patent Drawing, PTO-948.  
3.  Notice of Art Cited by Applicant, PTO-1449.  
4.  Notice of Informal Patent Application, Form PTO-152  
5.  Information on How to Effect Drawing Changes, PTO-1474.  
6.

**Part II SUMMARY OF ACTION**

1.  Claims 1 - 47 are pending in the application.

2.  Of the above, claims 1 - 21, 41-47 are withdrawn from consideration.

3.  Claims \_\_\_\_\_ have been cancelled.

4.  Claims 22 - 40 are allowed.

5.  Claims \_\_\_\_\_ are objected to.

6.  Claims \_\_\_\_\_ are subject to restriction or election requirement.

7.  This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8.  Formal drawings are required in response to this Office action.

9.  The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are  acceptable;  not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10.  The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been  approved by the examiner;  disapproved by the examiner (see explanation).

11.  The proposed drawing correction, filed \_\_\_\_\_, has been  approved;  disapproved (see explanation).

12.  Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has  been received  not been received  been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14.  Other

**EXAMINER'S ACTION**

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Applicant's election with traverse of Group III, claims 22-40 in Paper No. 5 is acknowledged. The traversal is on the ground(s) that the claims are closely related and should be given unitary consideration. This is not found persuasive because of the reasons set forth in the restriction requirement, which clearly points out how the inventions are distinct from one another.

The requirement is still deemed proper and is therefore made FINAL.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22, 26, 30 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Netherlands 7408641 or Japan 167475.

Note the abstract, which clearly tech digesting waste paperboard to delignify it. Inherently delignifying reduces the Kappa number, which Japan explicitly teaches a lower kappa number.

Claims 22, 24, 26, 30 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Murphy, Jr. '134 which teaches

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digesting corrugated waste board using steam heating and alkaline. It is deemed inherent that the kappa number is lowered since the same steps are performed as applicant claims.

Claims 23-25, 27-29, 31-40 are rejected under 35 U.S.C. § 103 as being unpatentable over Japan 167475 as applied above.

All of the limitations contained in these claims are obvious optimization of the corrugated board to be digested or are explicitly taught by Japan. For example Japan teaches the corrugated board has a Kappa number of at least 50. Thus to use a source of waste paper with a Kappa number of at least 80 is prima facie obvious and indeed encompassed by Japan's teaching. Japan teaches removal to a Kappa number of less than 40. The temperature range overlaps at 150°C (claims 35, 36). It would have clearly been obvious to use steam to heat the digestor as is well known in the art. Japan teaches bleaching (claim 39). It also would have been prima facie obvious to use kraft white liquor as the alkaline solution since kraft pulping liquor is one of the most well known widely used process for digesting (virgin) pulp.

Claims 24 and 25 are also rejected under 35 U.S.C. § 103 as being unpatentable over Japan '475 as applied to claims 22 and 23 above, and further in view of Murphy Jr. '134 which if necessary clearly teaches obviousness of direct steam heating a waste paper

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digestor.

Any inquiry concerning this communication should be directed  
to Karen Hastings at telephone number (703) 308-0470.  
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RICHARD V. FISHER  
SUPERVISORY PATENT EXAMINER  
ART UNIT 1303

10-26-91

Hastings/cp  
October 10, 1991